

Exhibit 4

Serial No.: 10/612,471
Examiner: Elahee, MD S

REMARKS

Claims 1-20 are pending in this application. Claims 1 and 12 have been amended.

Double Patenting

The Examiner has made a non-statutory double patenting rejection based on claims 1-20 of U.S. Patent Application No. 7,460,658. Based on the current amendment to the claims, Applicant does not believe a double patenting situation exists.

35 U.S.C. § 103

Claims 1-20 are pending in the application. Claims 1, 2, 4, 5, 12, 13 and 18 rejected under 35 U.S.C. § 103(a) as being unpatentable over Staples (5,889,845) in view of Cho (2003/0165145). Applicants respectfully traverse this rejection for at least the reasons stated below.

As stated in MPEP §2143.01, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Applicants respectfully submit, as is detailed above, that neither Staples nor Cho, either expressly or inherently, teach or suggest many limitations as recited in the pending claims.

The Examiner has rejected all of the limitations of claim 1, except for “a virtual location indexer ...” based on FIG. 3, and various quotes out of the Summary of the Invention of Staples. However, the Summary of the Invention does not present the invention as it functions, it provides an overview. The description for FIG. 3 states “Referring now to FIG. 3, an embodiment used for telecommuters and road warriors is shown. For a user who is a “telecommuter”, i.e., a user who is working at home and remotely connects to the corporate office, the telecommuter may operate with either a desktop or portable computer system, or optionally with another type of communications device. FIG. 3 illustrates a telecommuter operating with a desktop computer system, designated as 102A. If the telecommuter operates

Serial No.: 10/612,471
Examiner: Elahee, MD S

with a desktop computer system 102A, the user *telephony communication device 104 is preferably an add-in card to an expansion bus of the computer system 102A, such as a PCI (Peripheral Component Interconnect) card or AT bus card, or may be an external device.* As shown in FIG. 3, in one embodiment a telephone instrument 124 is connected to the computer system 102A. Alternatively, or additionally, the computer system 102A *executes software which presents a "virtual telephone" on the video screen of the computer system 102A.* The virtual telephone executing on the computer system preferably uses the computer's speakerphone, or the computer's built-in microphone and speakers, as the voice transmitter and receiver for the virtual telephone. For a "road warrior", i.e., a business traveler operating with a *portable or notebook computer 102B, the user telephony communication device 104 preferably comprises a PC Card, or the user telephony communication device logic is hardwired to the computer motherboard.* Users who are "road warriors", i.e., business users who travel and desire to "stay connected" to the corporate office, generally use a portable computer system 102B or a portable communications device (not shown). Thus, for road warriors, the user telephony communication device 104 preferably comprises a PCMCIA card, also referred to as a *PC Card, adapted for insertion into a PCMCIA slot of the portable computer system 102B.* Also, ink if the telecommuter uses a portable computer or notebook computer, the user telephony communication device 104 also preferably comprises a PC Card. The portable computer system 102B may include an external telephone instrument which connects to the computer system 102B. Alternatively, or additionally, as shown, the portable computer system 102B preferably executes software which presents a "virtual telephone" on the video screen of the computer system 102B, as described above. In this embodiment, the portable computer 102B preferably includes an integrated speakerphone which provides transmitter/receiver capabilities. As shown, each of the computers 102A and 102B are connected to the corporate office virtual presence server 106 via the public switched telephone network (PSTN). *Each of the computers 102A and 102B are also connected to the corporate office PBX 112 via the PSTN.* In one embodiment, the user telephony communication device 104 *includes an analog modem 184, preferably a V.34 modem, which is used where an ordinary analog telephone line is available to connect to the corporate office.* In a second embodiment, the user telephony communication device 104

Serial No.: 10/612,471
Examiner: Elahee, MD S

utilizes an *integrated services digital network (ISDN) terminal adapter 182*. The ISDN embodiment provides higher speed data transmissions and improved voice quality. Any of the various embodiments preferably also supports a local group three facsimile (fax) machine. *The PSTN connects to the corporate office virtual presence server 106 preferably via either ISDN terminal adapters 182 or analog V.34 modems 184, and the PSTN connects to the corporate PBX via PBX--Central Office phone lines, as is well known.* As shown in FIG. 3, *the virtual presence server 106 connects to the corporate PBX 112 via PBX lines. The corporate PBX 112 connects to various telephone instruments 122 in the corporate office, as is well known.* The virtual presence server 106 connects to the corporate PBX 112 to extend PBX features to the remote user and also to support voice communication between the corporate office and the remote user. *The virtual presence server 106 also connects to the corporate local area network (LAN) 114. As shown, the corporate LAN 114 may comprise an Ethernet network 132, a Token Ring network, or other type of local area network, as desired.* Various computer systems are connected to the LAN 114, as is well known. In one embodiment, the computer systems 102A and 102B comprise DSVD (digital simultaneous voice and data) modems as well as the appropriate software for enabling simultaneous voice and data transmissions. In another embodiment, the computer systems 102A and 102B *include a communications device, such as a modem, which utilizes a special protocol for multiplexing multiple data types on a single communications line*, such as a telephone line, including voice, LAN data, fax data, and telephony control data. In the present disclosure, the term *"telephony control data" includes PBX extension data* as well as other telephony control information. It is noted that a road warrior preferably has virtual phone and virtual fax software applications executing on his computer system. The telecommuter operating from his home may include a "real" fax machine as well as a "real" phone. Where a telecommuter's system includes a physical fax machine, and an ISDN connection is used, the analog facsimile data generated by the fax machine is preferably re-digitized in the remote computer system 102 and communicated over the PSTN to the virtual presence server 106. *In this embodiment, each of the remote computer system 102 and the virtual presence server 106 include a fax/modem chip. When the remote user sends a fax using the "real" fax machine, the remote computer 102 receives the fax, converts the analog data to*

Serial No.: 10/612,471
 Examiner: Elahee, MD S

digital data, and transmits the digital data to the virtual presence server 106. The virtual presence server 106 uses its fax modem to perform digital to analog conversion and provides the analog fax data to a "real" or virtual fax machine at any location, such as the corporate office. Alternatively, the virtual presence server may forward the fax data to a fax server for transmission."

Applicant's claims state "a service-user calling station ***connected to a packet-based network***, an improvement of an assembly for facilitating call connection between the first calling station and the service-user calling station, ***the service-user calling station having at least a first virtual calling-station identity in the first telephonic network such that the service-user calling station appears virtually resident in the first telephonic network***". The service-user calling station is connected to a packet-based network, while the first calling station is connected to a telephonic network. The improvement is that the service-user calling station has a first virtual calling station identity in the first telephonic network, i.e., non-packet based network, while the logical identity is in the packet-based network, such that the service-user calling station appears virtually resident in the first telephonic network. Staples does not disclose a packet-based network. ***There is nothing in Staples that teaches or suggests, expressly or inherently, that a packet-based network is used.*** In fact, even though Staples includes an ISDN connection, Staples goes on to state that the connection is via the ***PSTN*** connects to the corporate office virtual presence server 106 preferably via either ISDN terminal adapters 182 or analog V.34 modems 184, and the ***PSTN*** connects to the corporate ***PBX*** via PBX--Central Office phone lines, as is well known. As shown in FIG. 3, the virtual presence server 106 connects to the corporate PBX 112 via PBX lines. The corporate PBX 112 connects to various telephone instruments 122 in the corporate office, as is well known. presence as in a "virtual office." As one of ordinary skill in the art knows, the PSTN and a PBX are used for public switched telephone network calls, i.e. a circuit switched network, not a packet-based network. The Examiner has misinterpreted the prior art and distilled the invention down to a thrust or gist of the invention – *both of which are impermissible and invalidates the Examiner's analysis.* "In determining whether the invention as a whole would have been obvious under 35 USC 103, we must first delineate the invention as a whole. In delineating the invention as a whole, we look not only to the subject matter which is

Serial No.: 10/612,471
 Examiner: Elahee, MD S

literally recited in the claim in question... but also to those properties of the subject matter which are inherent in the subject matter and are disclosed in the specification. . . Just as we look to a chemical and its properties when we examine the obviousness of a composition of matter claim, *it is this invention as a whole, and not some part of it, which must be obvious under 35 USC 103.*” (Emphasis added) In re Antonie, 559 F.2d 618, 620, 195 USPQ 6, 8 (CCPA 1977) (citations omitted). Under this analysis, Staples is patentably distinct from Applicant’s claimed invention under 37 CFR 1.111(b). Applicant’s claims are patentable under this analysis.

The Examiner states that Staples also teaches “the *packet-based-network identity associated with logical connection of the service-user calling station to the packet data network and the virtual calling-station identity associated with a virtual residency location of the service-user calling station in the first telephonic network*, and said indexer accessed pursuant to call routing of a call between the first calling station and the service-user calling station to permit effectuation of the call connection therebetween, wherein the *call connection is local to the first telephonic network*”. However, as detailed in the above passage, the virtual residency in Staples is in the second local, not the first, wherein Applicant’s claim, in one embodiment, describes the virtual calling-station identity is associated with the virtual residency location of the service-user calling station in the **first** telephonic network. In Staples, the disclosure teaches a virtual office, i.e. one is connected via the PSTN and a PBX to a corporation and it is as if the corporation is at their home. While, in Applicant’s claim, in one embodiment, describes the virtual calling-station identity associated with a virtual residency location of the service-user calling station, i.e. it is as if the caller is local to wherever he calls, he can call anywhere due to the nature of a packet based network. The user in Staples can only log into the corporation via the PSTN and PBX. Then it is as if the “corporation is in their home.”

Finally, the Examiner asserts that Cho teaches “indexing together the at least the first virtual calling-station identity of the service-user calling station with a selected packet-based-network identity of the service-user calling station”. While Cho teaches indexing, Cho teaches compulsive indexing. A user must enter the addresses, specific code keys and group numbers, etc. For example, “[0033] In FIG. 1, the IP telephony system comprises a gatekeeper (G/K) 10, a plurality of IP terminals 22,24, a Authentication, Authorization and Account (AAA) server 30.

Serial No.: 10/612,471
 Examiner: Elahee, MD S

These elements are connected to the IP network. The G/K 10 includes a gatekeeper core 12, a Trivial File Transfer Protocol (TFTP) server 14, a Dynamic Host Configuration Protocol (DHCP) server 16 and a storage portion 18. The IP terminals 22, 24 are connected to the gatekeeper 10 for voice call service through the IP network or call service among the IP terminals. ***The call service among the IP terminals includes 1:n multi-call (or group call) service as well as 1:1 call service. The multi-call or group call service means that any source IP terminal is connected to a plurality of destination IP terminals managed by the gatekeeper 10.*** The IP terminals 22, 24 are connected to the DHCP server 16 of the gatekeeper 10 to be allocated their IP addresses and TFTP server IP addresses. Then they are connected to the TFTP server 14 to be allocated their phone numbers, namely subscriber's information of H. 323 IDs and gatekeeper IP addresses. The subscriber's information of phone number can adopt various terms according to the protocol, and the phone number is used as a virtual address, Virtual_Address #. ***Alternatively, the IP terminals 22,24 are provided the destination IP terminals' IP addresses from the gatekeeper 10 using the destination IP terminals' phone numbers, H.323 IDs, if they want to perform multi-calls.*** Subsequently, the source IP terminals 22,24 transmit compulsive setup message to the destination IP terminals corresponding to the IP addresses provided by the gatekeeper 10. Meanwhile, the source IP terminals 22, 24 transmit connection message automatically to the destination IP terminals without destination IP terminal's confirmation when they receive the compulsive setup message. ***Therefore, any source IP terminal becomes connected to the destination IP terminals compulsively when it generates compulsive reception message according to multi-calls.*** In other words, the call or multi call is received irregardless of whether or not the destination party or parties respond. The gatekeeper core 12 controls actions undertaken by the gatekeeper 10 generally. The storage portion 18 comprises a database in order to store information on the source IP terminals, which request registration. The storage portion 18 also stores package files to the database. The package files are downloaded from the AAA server 30 and stored by the gatekeeper 10 with the subscriber's information of the source IP terminal. At this time, the subscriber's information includes phone numbers of H.323 IDs and IP addresses, stored in the DB. When a function of the DHCP server 16 is used, the IP addresses are not necessary. The DHCP server 16 allocates the IP addresses

Serial No.: 10/612,471
 Examiner: Elahee, MD S

and the TFTP server's IP addresses to the destination IP terminals. The TFTP server 14 allocates subscriber's information as phone numbers of H.323 IDs and gatekeeper's IP addresses to the destination IP terminals. The TFTP server 14 stores IP addresses corresponding to the source IP terminals of H.323 IDs to the storage portion 18 in response to that information on subscribers who want to call, namely phone numbers of H.323 IDs, is provided by the source IP terminals. The elements of the gatekeeper 10 including the gatekeeper core 12, the TFTP server 14, the DHCP server 16 and the storage portion 18 are interconnected each other in order to make inter-processor communication possible. *The AAA server 30 authenticates the IP terminals 22, 24 in order for them to be connected to the IP network and accounts them for their connection.* [0046] Referring to the FIGS. 4a and 4b, the destination IP terminals 24 check if key data requesting the compulsive reception multi-calls from the user are input through the user interface portion 212 at step 410. *The key data may be comprised of "a specific code key +group number". Keys, not used as telephone numbers such as "#","*", etc., in the keypad maybe used as the specific code key. The group number means numbers designating a group of the destination IP terminals, defined for the multi-calls.* Accordingly, the source IP terminal 22 can decide the compulsive reception multi-calls by confirming that first key data are the specific code keys through the user interface portion 212. *The source IP terminal proceeds to step 412 and performs corresponding function when it decides the call request is a common call request, not the compulsive reception multi-calls at step 410."*

Cho discloses a *call service*. Applicant's claim, in one embodiment, describes an assembly and method of improving a communication network. Neither Staples nor Cho provide the necessary elements to obviate Applicant's invention. "[R]ejections on obviousness cannot be sustained by *mere conclusory* statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR, 550 U.S., 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). The Examiner has not provided any reasoning as to how the structure in Lee is in any way similar to that of Applicant's claims. Under this analysis, Cho is patentably distinct from Applicant's claimed invention under 37 CFR 1.111(b). Applicant's claimed invention is patentable under this analysis.

Serial No.: 10/612,471
 Examiner: Elahee, MD S

However, purely in the interest of expediting the prosecution of the instant invention, Applicant has amended claims 1 and 12 to include the following limitations:

1. (currently amended) In a communication network having at least a first calling station connected to a first telephonic network and a service-user calling station automatically connected to a packet-based network, an improvement of an assembly for facilitating call connection between the first calling station and the service-user calling station, the service-user calling station having at least a first virtual calling-station identity in the first telephonic network such that the service-user calling station appears virtually resident in the first telephonic network, said assembly comprising:

a virtual-location indexer embodied at the packet-based network, said indexer for automatically indexing together the at least the first virtual calling-station identity of the service-user calling station with a selected packet-based-network identity of the service-user calling station,

the packet-based-network identity automatically associated with logical connection of the service-user calling station to the packet data network and the virtual calling-station identity associated with a virtual residency location of the service-user calling station in the first telephonic network,

said indexer automatically accessed pursuant to call routing of a call between the first calling station and the service-user calling station to permit effectuation of the call connection therebetween, wherein the call connection is local to the first telephonic network, while permitting the first calling station to be physically located at another location.

Support for such limitations can be found at least in paragraphs [0029] through [0046] of the instant invention. Neither Staples nor Cho teach or suggest such limitations.

The Examiner states that he is taking Official Notice regarding claims 3, 16 and 17 that he is taking Official Notice that Staples teaches the “service-user calling station is moveable, separately connectable at the first logical location and at the at least the second logical location, and wherein the selected packet-based network identity indexed together by said virtual location indexer is updateable responsive to movement and connection of the service-user calling station separately at the first logical location and at the at least the second logical location.” However, ***Staples does not teach whether the index is updateable.*** Though, the Examiner is taking Official Notice that is well known to one in of ordinary skill in the art to modify Staples to incorporate the feature of updating an index in Staples invention. Still, as set forth above, the element “**indexing together the first virtual calling-station identity of the service-user calling**

Serial No.: 10/612,471
Examiner: Elahee, MD S

station with the selected packet-based-network identity of the service-user calling station” is not in Staples invention.

It would not be appropriate for the Examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known.

It is never appropriate to rely solely on “common knowledge” in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. Zurko, 258 F.3d at 1385, 59 USPQ2d at 1697 (“[T]he Board cannot simply reach conclusions based on its own understanding or experience-or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings.”). While the court explained that, “as an administrative tribunal the Board clearly has expertise in the subject matter over which it exercises jurisdiction,” it made clear that such “expertise may provide sufficient support for conclusions [only] as to peripheral issues.” Id. at 1385-86, 59 USPQ2d at 1697. As the court held in Zurko, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. Id. at 1385, 59 USPQ2d at 1697.

As such Applicant would like the examiner to support each and every instance of his statements above as to where every element of Applicant’s claim elements are supported in Staples.

As all the independent claims are allowable, all the dependent claims depending therefrom are also allowable. Per the above comments, Applicant believes the current claims are in condition for allowance. As such, Applicant believes that claims 1-20 are in condition for allowance.

CONCLUSION

For the above reasons, the foregoing amendment and response places the Application in condition for allowance. Therefore, it is respectfully requested that the rejection of the claims be withdrawn and full allowance granted. Should the Examiner have any further comments or suggestions, please contact the undersigned.